Bulletin of the Agricultural Chemical Society of Japan.

Vol. 14.
(Nos. 160-171)
1938

The Agricultural Chemical Society of Japan.
c/o Faculty of Agriculture, Tokyo Imperial University.

№ 14

Contents

I. Transactions.

PAGE

Masakazu YAMADA and Katuitiro TAKAKISI: Note on the Determination of Fusel Oil with Vanilline-Sulphuric Acid Reagent. *55*

Masakazu YAMADA, Katuitiro TAKAKISI and Tokuro TANABE: A New Aging Method of Saké. *56*

Masakazu YAMADA and Tatuo URANO: On an Irritant Smell of Saké Changed in Quality. *58*

Masakazu YAMADA and Hisao MATUI: On the Destruction of Hioti Smell by Hydrogen Peroxide. *59*

Y. IWATA, S. SUZUKI und K. YAMAFUJI: Über die Vergärbarkeit des Zuckerrohrsaftes. *112*

II. Abstracts from Transactions published in Japanese.

Page

Über die Acetylmethylcarbinol- und 2, 3-Butylenglykol-Bildung durch Mikroben. (IV).—Über den Bildungsmechanismus beider Verbindungen. (Y. Tomiyasu). 1

Die vorbeugende und heilbare Wirksamkeit der Milch und der Milcherzeugnissen für die von überschüssige Zuckernahrung verursachten Hindernisse. (R. Sasaki und M. Kandatsu). 1

On fatty oils of smoked fishes. (E. Takahashi and Y. Masuda). 2

Colloid-chemical studies on the soluble alginate. (I).—On the viscosity of the alginate. (N. Suzuki). 3

The change of oxidation-reduction potetials of water-logged soils. IV.—In-fluence of proteins and carbohydrates. (K. Shibuya, H. Saeki and K. Ryu). 3

Biochemical studies of the locust (IV). (C. Ichikawa). 5

Biochemical studies on glutathions. The third report.—Glutathione content in venous blood of rabbits. (M. Ogawa). 5

Biochemical studies on glutathione. The fourth report.—Glutathione content in venous blood of rabbits under latent influence of A-abitaminotic diet. (M. Ogawa). 5

On the method of quantitative estimation of ascorbic acid in tissues. (M. Ogawa). 6

On the method of quantitative estimation of glutathione in tissues. (Biochemical studies on glutathione. The fifth report.) (M. Ogawa). 7

Die Untersuchungen über die Microorganismen von Zuckerrohrsäfte. II.—Mitteilung. (R. Nakazawa, Y. Takeda und U. Suematsu). 8

Researches on the manufacture of alcohol from the Manchurian starchy materials. (IV). (E. Yoshino and M. Okabayashi.) 8

Experiment on the colon group of fishes. (VI) (continued). (Y. Yasukawa). 8

The determination of carbonic acid contained in solid substances. (Y. Iwasa and K. Iwamoto). 9

Studies on ascorbic acid oxidase. I. (N. Ito). 9

Alcohol manufacture from potato. (Part IV).—On the preparing of alcohol-mash by the method of acid-hydrolysis of potato. (II). (H. Okada, S. Kashiwabara and T. Sugiyama). 10

Sterilizing action of acids. XIth. Report. —The total summary and the total conclusion on the sterilizing action of mineral acids and fatty acids. (S. Tetsumoto). 12

On the method of determination of pH of soil under natural field condition. (M. Aoki). 13

On the fixation of sericin of raw silk. (Part. II).—Fixation of sericin powder by chromium salts. (M. Oku and Z. Hirose). 14

Studies on micro-methods for the chemical analysis of water. III.—A new potable colorimeter. (T. Tomiyama and M. Watanabe). 15

Composition of jerusalem artichokes and its inulase. (T. Asai). 15

Action of a green fluorescent substance like acetyl flavin on plants and animals. (Part I). (T. Tadokoro and T. Saito). 15

On the contents of 0.2 N HCl soluble phosphoric acid of Tyosen soils (IV). (H. Misu). 16

Effects of some substances in the extracts of rice polisings and beef liver on pellagra-like symptoms of rats due to high-sucrose diet. (U. Tange). 16

Feeding experiments with decomposion products of proteins. (V).—On the nutritive value of some protein derivaties and partial decomposition products. (S. Maeda). 18

On the fermentative degumming of waste silk. Part IV.—Enzymic action of degumming bacteria (Bacillus cereus sp.) upon sericin and fibroin. (H. Katagiri and T. Nakahama). 19

Studies on soya-been oil-foots. (2)—Isolation of free amino acids. [arginin, aspartic-, glutamic-, oxyglutamic acid and etc.] (K. Okano and I. Beppu). 19

On acid-soil of peculiar behavior. (V). (S. Osugi and M. Aoki). 20

Chemische Untersuchung über die Bestandteile der Rosskastaniensamen. II. Mitteil.

(R. SASAKI und M. KANDATSU). 21
Vitamin A potency and fatty substances of Sukesodara and Aburatsunozame eggs. (M. YOSHIDA). 21
The relation of the composition of liver oil fatty acids to the fishing season of the cod. (M. YOSHIDA). 21
On the correlation of the organic and the mineral matters contained in malberry leaves. (2). (K. KATO and S. NEGI). 21
On the cotents of 0.2 *N* HCl soluble phosphoric acid of Tyosen soils. (V). (H. MISU). 22
Chemical studies of green tea. 2.—On the saponin of green tea (1). (S. MACHIDA). 22
On the fixation of sericin of raw silk (Part III).—Deaminisation of sericin and fixation of deaminized sericin by chromium salts. (M. OKU and Z. HIROSE). 22
Chemical studies on Japanese coccidae. XVII.—On the resinous substance of Ceroplastes rubens Mask. IV.—Rubeabietic acid. (M. KAWANO and R. MARUYAMA). 23
On the contents of 0.2 *N* HCl soluble phosphoric acid of Tyosen soils. (VI). (H. MISU). 23
Zuckerrohrwachs. II. Mitteil.—Oxydationsversuche mit Zuckerrohrsitosterin. (T. MITSUI). 24
On the unsaponifiable matter of the alge fats. IV.—On the lipase activation as influenced by pelvesterol. (K. SHIRAHAMA). 24
A new glykoside from the bark of Rhamnus Japonica. (Z. NIKUNI). 25
On the production of ethylenoxide · α, β · 2-carboxylic acid by moulds. Part. II. (K. SAKAGUCHI, T. INOUE and S. TADA). 26
On the production of ethylenoxide · α, β · dicarboxylic acid by moulds. Part III. (K. SAKAGUCHI and T. INOUE). 27
On the production of succinic acid by Bacterium succinicum nov. sp. (K. SAKAGUCHI and S. TADA). 28
Action of a green fluorescent substance like acetyl flavin on plants and animals. (Part II). (T. TADOKORO and T. SAITO). 30
On the colouring matter of sugar cane named Badilla. (Y. OSIMA and R. YAMAMOTO). 30
Über die Acetylmethylcarbinol- und 2, 3-Butylenglykol-Bildung durch Mikroben. (V).—Optische Eingenschaften der Acetylmethylcarbiols (Acetoin). (Y. TOMIYASU). 31
Untersuchungen über den Abbau von Acetoin durch Mikroben. (I).—Über die VOGES-PROSKAUERsche Reaktion. (Y. TOMIYAMA). 32
Untersuchungen über den Abbau von Acetoin durch Mikroben. (II).—Experimenteller Nachweis der Acetoin-Assimilierung durch Mikroben. (Y. TOMIYAMA). 33
On the unsaponifiable matter of the alge fats. V.—On the "activity curves" for lipolytic action and the spectrum of pelvesterol. (K. SHIRAHAMA). 33
On the unsaponifiable matter of the alge fats. VI.—On some activators for lipolytic action. (K. SHIRHAMA). 34
Feeding experiments with decomposition products of proteins. (VI).—On the isolation of a new essential factor, oxyaminobutyric acid. (S. MAEDA). 34
Influence of three essential elements (N.P.K) on the yield and quality of an eggplant. (C. ICHIKAWA). 34
Untersuchungen über die Verwitteung der Eruptivgesteine V.—Zusammensetzung des Tons aus Basaltböden. (M. HARADA). 35
Plants nutritious study of "Kenaf" (Hibiscus canabinus L.) Part I. (M. IKEDA and T. INADOME). 39
Studies on high sugar diet. I. (Y. SAKURAI, T. KASIWA and S. OMORI). 39
On the retting of some vegetable-fibre-materials (Part IV).—The characteristics of the effective bacteria for the retting of ramie. (T. TAKAHAMA and S. NISHIMURA). 40
On the retting of some vegetable-fibre-materials. (Part V).—On the results of the retting vegetable-fibre-materials with Bacillus subtilis var ramie. (T. TAKAHAMA and S. NISHIMURA). 40
Feeding experiment with decomposition product of proteins. (VII).—On the nutritive significance of histidine, arginine and lysine. (S. MAEDA). 40
Biochemical studies on "Sotetsu" (Cycar revoluta Thunb.). Part IX.—On the chemical constituent of the outer spermoderm of "Sotetsu" -seed. (K. NISHIDA). 42

An improved method to determine the digestibility of protein in fish meal. (K. Oshima and S. Itaya). 42
The relation of the qualities and the manufacturing method of fish meal and scrap. (K. Oshima and S. Itaya). 43
On the oxidation and its prevention of vitamin A in oils. (Y. Masuda). 43
Studies on the action of arginase on canavanin and arginine I.—The identification of canavanase and arginase. (M. Kitagawa and Y. Eguchi). 43
Über die Fabrikation des Alkohols aus rohen Bataten.—Fortgesetzte Mitteilung. (M. Nakano, K. Kobashi und M. Takeshita). 43
Feeding experiments with decomposition products of proteins. (VIII).—Can norleucine replace lysin in the diet? (S. Maeda). 43
On the alcohol-manufacture from Jerusalem artichoke. (Part IV).—Alcoholic fermentation of Jerusalem artichoke. (T. Asai). 43
Researches on "Tundrite". Part I.—Warping of artificial lumbers. (S. Huzii). 43
Über die Gärungsmikroorganismen in Awamori-Bereitung (III).—Am Wohlgeschmack teilnehmende Mikroorganismen und gemischte Vergärung. (R. Nakazawa und M. Simo). 44
Oryzanin, "Antineuritic vitamin". VII.—On the activity of the crystalline vitamin B_1 and the international standard. (S. Ohdake and T. Yamagishi). 44
On the soil type in Manchuria. Part I.—The brown forest soil in north-eastern Manchuria. (R. Kawashima). 49
Fibre of flowers of Typha latifolia L. (Y. Kihara). 51
Studies on the mucilage from Rhodophyceae. I.—Isolation of the mucilage from 3 species of chondrus. II. The chemical nature of the mucilage from Chondrus ocellatus holmes. (T. Mori and Y. Tutiya). 52
Chemical studies on Japanese Coccidae. (VIII).—Summary of the reports I~XVII. (M. Kawano and R. Maruyama). 52
Untersuchungen über den Abbau von Acetoin durch Mikroben. (3).—Über den Abbau-Mechanismus von Acetoin. (Y. Tomiyasu). 52
Untersuchungen über den Abbau von Acetoin durch Mikroben. (4).—Eine Klassifikation der Bakterien der Coli-Aerogenes Gruppe, unter Berücksichtigung ihrer Fähigkeit des Auf-und Abbaues von Acetoin. (Y. Tomiyasu). 53
On the optical properties of the fermentation lactic acids. Part. VI.—On some properties of racemiase. (H. Katagiri and K. Kitahara). 61
On the hydrolytic decomposition products of the mucilaginous substance of yam.—(Dioscorea Batatas, Decne). (T. Takahashi). 62
On yeasts from apples. (T. Asai). 62
On the content of 0.2 *N* HCl soluble potash in Tyosen soils. (1). (H. Misu). 62
Chemical studies on the fluorescence of the color in sake. (T. Tadokoro, T. Saito and K. Ito). 62
Feeding experiment with amino acid mixture.—Synthesis and physiological significance of α-amino-β-oxy-butylic acid. (S. Maeda, T. Higasi and H. Matuoka). 62
Chemical studies on Japanese Coccidae. (XIX).—Nitrogenous and inorganic substances of *Tachrdina theae* Green et Mann. (M. Kawano and R. Maruyama). 62
On the inorganic constituents of green-manure crops. III. (K. Konishi and T. Tsuge). 63
Blätteralkohol. I. Mitteilung.—Vorkommen von Blätteralkohol im Pflanzenreich. (S. Takei, Y. Sakato, M. Ono und Y. Kuroiwa). 63
Blätteralkohol. II. Mitteilung.—Einige aus Blätteralkohol synthetisch gewonnene Riechstoffe. (S. Takei, M. Ono, Y. Kuroiwa, T. Takahata und T. Sima). 64
Untersuchungen über die Herstellungs-Methode des Bagasse-Zellstoffes.—(1). Über den Bagasse-Zellstoff nach dem Natronverfahren. (S. Tanaka und M. Kooriyama). 65
The chemical constituents of Actinidia lindl. var. Rufa Makino. II. (Y. Kihara). 66
On the soil type in Manchuria. (Part II).—The brown forest soil in Koroto. The basic reddish soil in Yohakuji. (R. Kawashima). 67
Some new ingredients of brown algae, VII.—On the unsaponifiable liquid part of the algae fats. (K. Shirahama). 68

Feeding experiment with amino acid mixture (II).—On the nutritive value of alanine. (S. MAEDA, T. HIGASI and H. MATUOKA). 69
Studies on the enzymes of lactic acid bacteria. (Part I) —On fumarase of lactic acid bacteria (K. KITAHARA and H. KATAGIRI). 69
Synthesis and Hofmann's decomposition of certain alkaloids of aporphine type (Derivatives of domesticine). (H. SHISHIDO). 70
Studies on the action of arginase on canavanin and arginine II.—The marked difference of the influence of manganese salt and ferrous salt upon the action of arginase on canavanin and arginine. (M. KITAGAWA and T. WATANABE). 70
On the acidity and exchangeable lime content of good tea farm soil in Japan. (R. KAWASHIMA). 71
Influence of three essential elements (N.P.K.) on the yield and quality of the cucumber. (C. ICHIKAWA). 71
On the content of 0.2 *N* HCl soluble potash in Tyosen soils. (II). (H. MISU). 71
Comparative studies on the strains of wine yeast, indigenous to Japan and other countries, for wine making. (T. INOUE). 71
On the koji-amylase. Part X.—On the behaviours of α-, β-amylases and maltase to various external conditions. (Y. TOKUOKA). 71
On the koji-amylase. Part XI.—Effect of koji-materials on the production of amylases and maltase. (Y. TOKUOKA). 72
Effect of salts in water for the silk-reeling on the colour and lustre of raw silk. Part I.—On the salts in waters for cooking and reeling of cocoons. (T. NAKAHAMA and S. NISIMURA). 73
Effect of salts in water for the silk-reeling on the colour and lustre of raw silk. Part II.—Effect of salts on the colour and lustre of raw silk. (T. NAKAHAMA and S. NISIMURA). 73
Alkohol manufacture from potatoes (V).—Preliminary treatments of potatoes on semi-industrial scale. (K. HAYASI and A. MATUMI). 74
Alkohol manufacture from potato (VI).—Studies on pressed juice (I). (T. YOSHIMACHI and Y. OTAKU). 74
Alkohol manufacture from potato. (VII).—Acclimatization of yeast in acid-sugar mash. (T. YOSIMACHI). 74
A study in the mannitol-forming bacteria. (S. BABA). 74
Experimentelle Untersuchung über die Wirkung von Radium und Röntgen-Strahlen auf die Gärungsmikroorganismen (I Mitt.) —Auf die morphologischen und biochemischen Eingenschaften der Radium-Rassen des *Aspergillus niger*. (R. NAKAZAWA und M. SIMO). 76
Action of a green fluorescent substance like acetyle-flavin on plants and animals. (Part III). (T. TADOKORO and K. ITO). 77
Feeding experiments with rice proteins. (S. MAEDA, T. HIGASI and H. MATUOKA). 77
On the content of 0.2 *N* HCl soluble potash in Tyosen soils. (III). (H. MISU). 77
Chemical researches on the pulp woods of Manchukuo. Part IV.—Chemical analysis and cooking experiment of the hard woods. (M. SHIKATA and T. TATSUNO). 77
Studies on the yeasts found in "Miso". (M. MOGI). 80
An improved method for estimating in vitro the digestibility of fish meal. (T. TOMIYAMA and S. ISHIKAWA). 81
The effect of heating or dehydration during the manufacture of fish meal upon its digestibility. (T. TOMIYAMA and S. ICHIKAWA). 82
Enzymatic studies on cereals (Part X).—On the separation of amylases in rice. (G. YAMAGISHI). 82
Studies on ascorbic acid (I).—On the distribution of ascorbic acid and glutathion in the animal tissues and organs. (K. FUJIMURA). 83
On the raw materials of tannins in Manchukuo. (M. SHIKATA and M. CHIKASUE). 84
Alkohol manufacture from potato. (Part VIII~IX).—On the alkohol-fermentation of acid-saccharified potato mash (I) (II). (H. OKADA). 86
Alkohol manufacture from potato. (X).—Seed-cultures (T. YOSHIMACHI). 87
On the optical properties of the fermentation lactic acids. (Part VII).—Effect of the form of nitrogen upon the optical pro-

perties of fermentation lactic acids. (II. KATAGIRI and K. KITAHARA). 88
On the ascorbic acid formation from mannose in plants and in animal bodies. (T. TADOKORO and K. ITO). 89
Utilization of irradiated rice-bran-cake-koji for poultry feeding. (K. YOKOYAMA and R. TAKATA). 89
On the alkohol-manufacture from Jerusalem artichoke (Part V~VII). (T. ASAI and T. YUKINOURA). 89
On the varieties of Aspergillus oryzae employed in syoyu-manufacture. Part II.—Influences of temperature and pH upon growth, etc. (M. KIBI). 90
Studies on the manuring of Juncus effusus L. var. decipiens Buch. Report I.—On the manurial value of different kinds of nitrogen compounds. (H. SUTOH). 90
Studies on the high pressure hydrogenation of soya bean oil. VI.—On the formation of unsaturated higher fatty alkohol. (Y. SHINOZAKI and S. SUMI). 91
Studies on the high pressure hydrogenation of soya bean oil. VII.—On the mechanism of the formation of higher fatty alkohol. (Y. SHINOZAKI and S. SUMI). 92
Studies on the high pressure hydrogenation of soya bean oil. VIII.—On the influence of the conditions applied upon the formation of unsaturated higher fatty alkohol. (Y. SHINOZAKI and S. ADACHI). 92
Studies on the high pressure hydrogenation of soya bean oil. IX.—On the influence of the preparation of Zn-Cr catalyst upon the formation of unsaturated higher fatty alkohol. (Y. SHINOZAKI and S. SUMI). 92
On the nutritive value of proline and oxyproline.—Feeding experiments with amino acid mixture. (III). (S. MAEDA, T. HIGASI and H. MATSUOKA). 93
Alkohol manufacture from potato. (Part XI).—On the manufacture of absolute-alkohol on semi-industrial scale. (I). (H. OKADA). 93
On the content of 0.2 *N* HCl soluble potash in Tyosen soils. (VI). (H. MISU). 93
Studies on the yeasts found in "Miso". (M. MOGI). 94
Spectrosc opicalstudies of the fluorescence in sake. (T. TADOKORO, N. TAKASUGI and K. ITO). 93
On the ascorbic acid formation from mannose in plants and animal bodies. II. (T. TADOKORO and K. ITO). 95
Alcohol manufacture from potato. (Part XII). On the manufacture of absolute-alkohol on semi-industrial scale. (II). (H. OKADA). 95
Studies on vitamin C. (I).—On the Vitamin C content in various flowers and leaves. (H. MITUDA). 96
On the relation between the nitrogen compound of various seeds of crops and the diastatic power of their malts.—Part I. Studies on kaoliang. (H. KATAGIRI and N. MUGIBAYASI). 97
On the relation between the nitrogen compounds of various seeds of crops and the diastatic power of their malts.—Part II. Studies on beans, especially on mung beans. (H. KATAGIRI and N. MUGIBAYASI). 98
On the nutritive deficiency of kaoliang protein. (S. MAEDA, T. HIGASI and H. MATSUOKA). 99
On fatty oils of smoked fishes. (II).—Feeding experiment with smoked herring oils. (E. TAKAHASHI and Y. MASUDA). 99
Studies on the cell-wall constituents of soybean. (I).—Cell-wall constituents of the embryo of the seed. (S. SASAKI and Y. YAMASHITA). 100
Biochemical investigation of mosaic disease of tobacco plants. III.—On catalase in the leaves of healthy and mosaic plants. (Y. OKADA and K. KATAI). 101
Statistic studies of soils. (I). (H. MISU). 101
Berichtigung zur Arbeit: Über die technische Citronensäuregärung. I.—Mitt. von Nakazawa, Takeda und Nakano. (Diese Zeitschrift 1937, 13, 52, 62). (M. NAKANO). 101
Researches on the electrolytic reduction potentials of organic compounds. Part 26.—On the standard electrolytic reduction potential-pH curve. (I. TACHI). 101
Studies on the yeasts found in "Miso". (M. MOGI). 102
Some new ingredients of brown algae, VIII.—On the brown compounds of phosphorus. (K. SHIRAHAMA). 103
On the relation between the nitrogen compounds of various seeds of crops and the diastatic power of their malts.—Part III. Studies on glutinous and non-glutinous

rice. (H. KATAGIRI and N. MUGIBAYASI). 103
Studies on vitamin C. (II).--On the variation of the vitamin C content in some fruits. (H. MITUDA). 104
On the formation of ascorbic acid from mannose in plants and in animal bodies. III. (T. TADOKORO and K. ITO). 105
On the retting of vegetable fibre materials. —Part VI. The selection of useful aerobes for the bacterial retting of hemp fibre materials. (H. KATAGIRI and T. NAKAHAMA). 105
On the retting of vegetable fibre materials. Part VII. The characteristics of the useful bacteria for the aerobic retting of hemp fibre materials. (H. KATAGIRI and T. NAKAHAMA). 105
Nutritional chemistry of flowers. (Part. II). —Compositions of cauli-flowers and vitamins in flowers of double cherry-blossoms, rapeseed flowers and cauliflowers. (S. SHINANO and M. MORIMOTO). 106
Chemical studies on Japanese Coccidae. (XX).—On carbohydrates and waxes of *Tachardina theae* Green et Mann. (K. KAWANO and R. MARUYAMA). 107
Researchs on the electrolytic reduction potentials of organic compounds.—Part 27. The electrolytic reduction potential of furfural. (I. TACHI). 108
Studies on the amylo-process for the production of alkohol from potatoes. (I). (S. DOI and R. TAKAHASHI). 107
Biochemical investigation of mosaic disease of tobacco plants. IV.—On oxydase, peroxydase and amylase in the leaves of healthy and mosaic plants. (Y. OKUDA, K. KATAI and T. HIBI). 108
Some new ingredients of brown algae, IX. —A brown pigment. (K. SIARHAMA). 108
The composition of soy-bean oil residue. (S. MORI). 108
Statistic studies of soils. (II). (H. MISU). 108
Studies on the nutritional chemistry of cuttle fishes. (I). (Y. HATAKOSI). 109
Studies on the utilization and digestion by silkworms of the carbohydrates contained in mulberry leaves. (Part V).—The influence on the activity of digestive enzymes of silkworms when bred on mulberry leaves to which cane-sugar was added in different proportions. (K. KATO). 109
Effect of heating on yeast glutathion.— (Biochemical studies on glutathion. The sixth report.) (M. OGAWA). 109
Some new ingredients of brown algae, X. —Brown phosphorus-containing compounds and brown pigments. (K. SIRAHAMA). 120
On the selection of grape varieties for wine making. (H. KAWAKAMI and S. MATUMIYA). 120
Studies on the lactic acid bacteria isolated from milk and dairy products. (K. KITAHARA). 121
Statistic studies of soils. (II). (H. MISU). 122
Studies on the utilization and digestion by silkworms of the carbohydrates contained in mulberry leaves. (Part VI).—The influence on the activity of blood enzymes and blood nitrogen compositon of silkworme bred on mulberry leaves to which cane sugar was added indifferent proportions. (K. KATO and S. MIWA). 122
Studies on bios. Part I.—Effects of β-alanine, meso-inositol, vitamin B_1, B_2 and B_6 on saccharomyces cerevisiae. (N. OKOTI). 122
Studies on vitamin C. (III).—Ascorbic acid oxidase. (H. MITUDA). 123
Studies on the nutritional chemistry of cuttle tishes. (I). (Y. HATAKOSHI). 123
Röntgenographische Untersuchung über die Myzel der Schimmelpilze. (Y. GO, S. NAKAMURA und S. NAGATA). 123
Glutathion content of commercial yeast preparations.—(Biochemical studies on glutathion. The seventh report). (M. OGAWA). 125
The utilization of the by-products of soybeans. (Part IV).—The manufacture of caramel from stachyose. (Y. IWASA). 125
On the productions of etylenoxide $\alpha \cdot \beta$ dicarbooxylic acid by moulds. (Part IV). (K. SAKAGUCHI and T. INOUE). 126
Über Kahmhefe-verhütenden Bestandteil im verseifbaren Anteil von Tamariöl. (K. MIYAJI und M. OGURI). 126